



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/733,304	12/08/2000	Samuel Earl Moore	Series 5551	2994

7590

12/04/2002

Air Liquide  
Intellectual Property Department  
Ste. 1800  
2700 Post Oak Blvd.  
Houston, TX 77056

EXAMINER

DEL SOLE, JOSEPH S

ART UNIT

PAPER NUMBER

1722

DATE MAILED: 12/04/2002

6

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/733,304

Applicant(s)

MOORE, SAMUEL EARL

Examiner

Joseph S. Del Sole

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of claims 1-10 in Paper No. 5 is acknowledged.
2. Claim 11 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected method, there being no allowable generic or linking claim.
3. Although the claims were elected without traverse, the Applicant argued that the group was not 'independent and distinct'. The Examiner disagrees, for the reasons cited in the Office action of 9/19/02 and reiterates that "the process as claimed can be practiced by another and materially different apparatus such as an apparatus including extruders and lines/valves for delivering core and sheath materials, or an apparatus including fluid jets or a chiller (for solidifying the fibers), or an apparatus including a heater (for evaporating solvent) or an apparatus including a solvent extraction bath." The Applicant presented no further argument.

***Information Disclosure Statement***

4. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 5-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 is vague and indefinite because it is unclear whether the "at least one needle" of line 1 is the same needle as claimed in line 3 of claim 1.

Claim 5 is vague and indefinite because the limitation "receiving a portion of each said needle" in lines 2-3 does not clearly recite what physical structure receives the needle. As the claim is written, either the spinneret body or the needle mounting hole may be receiving the portion.

Claim 5 recites the limitation "said needle" in line 3. There is insufficient antecedent basis for this limitation in the claim because it is unclear if the needle referred to is the needle of claim 5, line 1 or the needle of claim 1, line 3.

Claim 6 is vague and indefinite because it is unclear whether "a bore forming fluid passage" of line 3 is the same or different from "a bore forming fluid passage" as recited in line 5 of claim 1.

Claim 7 is vague and indefinite because it is unclear whether the "bore forming fluid passage" of line 1 is the same as the passage of claim 6, line 3 or the passage of claim 1, line 5.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Moore, Sr. (5,320,512).

Moore, Sr. teaches a spinnerette assembly (Fig 1) having at least one extrusion orifice (Fig 1, #26); a hollow needle (Fig 1, #18) extending through the extrusion orifice in a concentric manner to define an annular passage (Fig 1, #28) around the needle in the extrusion orifice; a bore forming fluid passage (Fig 1, #15) communicating with the interior of each needle; a fiber-forming material passage (Fig 1, #16) formed in the spinnerette assembly, wherein each material passage has a fiber-forming material inlet port extending from a surface of the assembly to an interior of the assembly (Fig 1, the portion in #14) and a transverse passage extending from the material port to each annular passage (Fig 1, the portion bordering #12 and #14); the transverse portion is a backcut portion of the material passage that entirely surrounds the needle in a continuous manner and is in communication with the extrusion orifice; the material port extends substantially parallel to the extrusion orifice and the transverse passage extends substantially perpendicular to the material port (as shown by the portion of the transverse passage that follows a line between #12 and #14); the spinnerette assembly comprises a spinneret body (Fig 1, #12 and #14) and a bottom plate (Fig 1, #10); the

needle is affixed in a needle mounting hole formed in the spinnerette body and receiving a portion of the needle (Fig 1); the needle mounting hole is in communication with the bore forming fluid inlet port at a surface of the spinnerette body via the bore forming fluid passage (Fig 1); the bore forming fluid passage has a first bore forming fluid conduit coaxial with the needle and in communication with the needle (Fig 1, the portion of the passage in the hold around the needle) and a second bore forming fluid conduit that extends at an angle with respect to the first bore forming fluid conduit from the bore forming fluid conduit to a surface of the spinnerette body (Fig 1); the extrusion orifice extends through portions of the spinnerette body and the bottom plate; and the material passage is formed in the spinnerette body.

9. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Kinhead (2,818,034).

Kinhead teaches a spinnerette assembly (Fig 9) having at least one extrusion orifice (Fig 9, defined in part by #39); a hollow needle (Fig 9, #38) extending through the extrusion orifice in a concentric manner to define an annular passage (Fig 9) around the needle in the extrusion orifice; a bore forming fluid passage (Fig 9, #24) communicating with the interior of each needle; a fiber-forming material passage (Fig 9, defined in part by #19) formed in the spinnerette assembly, wherein each material passage has a fiber-forming material inlet port extending from a surface of the assembly to an interior of the assembly (Fig 9 nearest #17) and a transverse passage extending from the material port to each annular passage (Fig 9, nearest #33); the transverse portion is a backcut portion of the material passage that entirely surrounds the needle in a continuous

manner and is in communication with the extrusion orifice; the material port extends substantially parallel to the extrusion orifice and the transverse passage extends substantially perpendicular to the material port; the spinnerette assembly comprises a spinneret body (Fig 9, #12) and a bottom plate (Fig 9, #11); the needle is affixed in a needle mounting hole formed in the spinnerette body and receiving a portion of the needle (Fig 9); the needle mounting hole is in communication with the bore forming fluid inlet port at a surface of the spinnerette body via the bore forming fluid passage (Fig 7, at #14); the bore forming fluid passage has a first bore forming fluid conduit coaxial with the needle and in communication with the needle (Fig 7, #24) and a second bore forming fluid conduit that extends at an angle with respect to the first bore forming fluid conduit from the bore forming fluid conduit to a surface of the spinnerette body (Fig 7, #25 and #26); the extrusion orifice extends through portions of the spinnerette body and the bottom plate; and the material passage is formed in the spinnerette body.

10. Claims 1-3 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Coplan et al (4,315,877).

Coplan et al teach a spinnerette assembly (Fig 1) having at least one extrusion orifice (Fig 1, defined in part by #14); a hollow needle (Fig 1, #18) extending through the extrusion orifice in a concentric manner to define an annular passage (Fig 1) around the needle in the extrusion orifice; a bore forming fluid passage (Fig 1, the passage communicating #28) communicating with the interior of each needle; a fiber-forming material passage (Fig 1, defined in part by #16) formed in the spinnerette assembly, wherein each material passage has a fiber-forming material inlet port extending from a

Art Unit: 1722

surface of the assembly to an interior of the assembly (Fig 1) and a transverse passage extending from the material port to each annular passage (Fig 1, the portion of the material passage at the #22); the transverse portion is a backcut portion of the material passage that entirely surrounds the needle in a continuous manner and is in communication with the extrusion orifice; the material port extends substantially parallel to the extrusion orifice and the transverse passage extends substantially perpendicular to the material port (Fig 1); and the material passage is formed in the spinnerette body.

***Claim Rejections - 35 USC § 103***

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moore, Sr. (5,320,512) in view of Ogata (3,526,571).

Moore, Sr. teaches the apparatus as discussed above.

Moore, Sr. fails to teach multiple transverse passages and extrusion orifices for each fiber forming material port.

Ogata teaches multiple transverse passages (Fig 1, #7) and extrusion orifices (Fig 1, #8) for a single material port (Fig 1, #2) for the purpose of creating multiple fibers while supplying the fiber material from just a single port.



It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Moore, Sr. with a single material port for multiple transverse passages and extrusion orifices as taught by Ogata because it is a more efficient arrangement requiring less machining of the spinnerette assembly and therefore less cost.

### ***Double Patenting***

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. Claims 1-10 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over either claims 1-9 and 24 or claims 12-20 and 24 of copending Application No. 09/733,303. Although the conflicting claims are not identical, they are not patentably distinct from each other because all of the limitations of claims 1-10 are recited within the claims of 09/733,303, the claims of 09/733,303 merely contains additional limitations.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Art Unit: 1722

**Correspondence**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph S. Del Sole whose telephone number is (703) 308-6295. The examiner can normally be reached on Monday through Friday from 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Jan Silbaugh, can be reached at (703) 308-3829. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 for non-after finals and (703) 872-9311 for after finals.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

*Joseph S Del Sole*

J.S.D.

November 27, 2002

*Jan H Silbaugh*

JAN H. SILBAUGH  
SUPERVISORY PATENT EXAMINER  
ART UNIT ~~17~~ 1722

*12/6/02*